

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-9. (Canceled)

10. (Currently amended) An information processing device comprising:
a first storage means[[,]] for storing an encrypted first key encrypted by a second key shared with another device and a decoding means, the first storage means comprising:

first authentication means for authenticating the decoding means and generating a temporary key shared with the decoding means;

first encrypting/decrypting means for decrypting the encrypted first key with the second key, and for encrypting the first key with the temporary key; and

transmitting means for transmitting the encrypted first key [[with]] and the temporary key generated by the first authentication means;

the decoding means comprising:

second authentication means for authenticating the first storage means-
~~and sharing the temporary key with the first storage means;~~

receiving means for receiving the encrypted first key [[with]] and the temporary key from the first storage means; and

second encrypting/decrypting means for decrypting the encrypted first key with the temporary key;

wherein the decoding means decodes the information with the first key obtained by the second encrypting/decrypting means.

11. (Currently amended) An information processing method comprising:
- a first storage step of storing an encrypted first key encrypted by a second key;
 - a first authentication step of authenticating ~~the~~ a first storage decoding step and generating a temporary key, the temporary key being shared in the first decoding step;
 - a first encrypting/decrypting step of decrypting the encrypted first key with the second key, and encrypting the first key with the temporary key;
 - transmitting the encrypted first key ~~with~~ and the temporary key generated in the first authentication step;
 - ~~[[a]] the first decoding step that includes~~ including a second mutual authentication step of authenticating the first storage step ~~and for sharing the temporary key with the first storage step~~;
 - receiving the encrypted first key ~~with~~ and the temporary key;
 - a second encrypting/decrypting step of decrypting the encrypted first key with the temporary key; and
 - a second decoding step of decoding the information with the first key obtained by the second encrypting/decrypting step.

12. (Currently amended) A program providing medium for providing a computer-readable program ~~with respect to~~ cause an information processing device to perform a method, comprising:

a first storage step of storing an encrypted first key encrypted by a second key;

a first authentication step of authenticating a first encrypting/decrypting step and generating a temporary key, the temporary key being shared in the first encrypting/decrypting step;

[[a]] the first encrypting/decrypting step [[of]] including encrypting/decrypting the encrypted first key with the second key and ~~for~~ including encrypting the first key with the temporary key;

transmitting the encrypted first key with the temporary key;

the program causing ~~the~~ a decoding means to execute processing comprising:

a second authentication step of authenticating the first storage step ~~and for sharing the temporary key with the first storage step~~;

receiving the encrypted first key with the temporary key from the first storage step;

a second encrypting/decrypting step of decrypting the encrypted first key with the temporary key; and

a third ~~decoding~~ encrypting/decrypting step of decoding the information with the first key obtained by the second encrypting/decrypting step.

Claims 13-71. (Canceled)